DETAILED ACTION

1. Acknowledgement is made in the receipt of the amendment filed August 6, 2008.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-304309 to Nomura in view of EP 0 432 122 A2 to Adolfsson et al.

Nomura teaches a hub unit, comprising: a rotation side raceway 9; a fixed side raceway 12 having a knuckle arm; rolling bodies 13; a flange 16 is integral with the fixed side raceway; a caliper mount 17 is separate from the flange; the flange, the knuckle and the caliper mount are fixed to each other by a bolt 21; the flange is positioned at an outer side relative to the knuckle.

However, Nomura fails to teach the flange positioned at an axially outer side relative to the caliper mount. This merely requires the repositioning of the caliper mount from one side of

the flange to the other side of the flange, and is interpreted as a design or engineering choice. It would have been obvious to one of ordinary skill in the art to have simply moved the caliper mount in Nomura to the opposing side of the flange as there are only a finite number of places (specifically two) that the mount could be positioned relative to the flange, and as a matter of design choice, since this would have provided a greater axial space between bolts 8 and 21, thereby creating an easier environment with which to work.

In addition, Nomura fails to teach the use of a brake torque sensor on an axially outer surface of the flange. Adolfsson et al. teach a hub unit provided with a brake torque sensor 4 on an axially outer surface of the flange. This provides a sensing unit not as affected by mass inertia forces that occur during wheel movements, see column 2 lines 9-14. It would have been obvious to one of ordinary skill in the art to have provided the flange of Nomura with a brake torque sensor as taught by Adolfsson et al., thereby providing accurate brake torque readings while minimizing adverse effects caused by wheel movements.

Response to Arguments

5. Applicant's arguments with respect to claim 11 have been considered but are moot in view of the new ground(s) of rejection. It is noted that the claim language merely requires the sensor be positioned on an outer surface of the flange, which includes the inboard and outboard side of the flange. In any case merely reciting the sensor be placed on an outer axial side of the flange would be considered an obvious variant.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Wednesday-Friday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi, can be reached at 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

TJW

/Thomas J. Williams/
Primary Examiner, Art Unit 3657

October 23, 2008